

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

- 1 1. (currently amended) A method of specifying a structure, within a computer system, of
2 an instance of a class, the method including the step of:
3 associating with said instance of said class an attribute that is not in said class or any
4 superclass of said class, thereby establishing for said instance said structure
5 that includes storage for data associated with said attribute; and
6 wherein associating said attribute with said instance does not cause said attribute to
7 become an attribute of said class.
- 1 2. (original) The method of claim 1 wherein the step of associating further
2 includes the steps of:
3 establishing a property bundle that is associated with one or more attributes that are
4 not in said class or any super class of said class; and
5 associating said instance with said property bundle.
- 1 3. (original) The method of claim 2 further comprising the step of:
2 storing within a database, objects that define said instance, said property bundle, and
3 said one or more attributes.
- 1 4. (original) The method of claim 1 further comprising the step of:
2 maintaining an object relational mapping system that indicates a correlation between
3 said instance and data stored in a relational database.

- 1 5. (original) The method of claim 1 wherein said step of associating includes
2 establishing a pointer from said instance to a property bundle.
- 1 6. (original) The method of claim 5 wherein said step of associating includes
2 establishing a pointer from said attribute to said property bundle.
- 1 7. (original) The method of claim 1 wherein a property class contains said attribute.
- 1 8. (original) The method of claim 1 further including the step of:
2 associating a key with said attribute wherein said key identifies said attribute.
- 1 9. (original) The method of claim 8 wherein said key is a user defined key.
- 1 10. (original) The method of claim 1 wherein the step of associating further includes the
2 step of:
3 maintaining a table that includes an entry that indicates that said instance is associated
4 with said attribute.
- 1 11. (original) The method of claim 10 wherein the step of maintaining a table further
2 includes the step of:
3 maintaining said entry to include a key that identifies said attribute.
- 1 12. (original) The method of claim 10 wherein the step of maintaining a table further
2 includes the step of:
3 maintaining said table externally to said instance.
- 1 13. (currently amended) The method of ~~claim 1~~ claim 10 wherein the step of maintaining
2 a table further includes the step of:

3 maintaining said table internally to said instance.

1 14. (original) The method of claim 1 wherein the step of associating further includes the

2 steps of:

3 storing into said instance a hash table; and

4 locating an entry in said hash table for said attribute.

1 15. (original) The method of claim 14 further includes the steps of:

2 receiving data that is designated as a key for locating said entry in said hash table; and

3 using said data as said key to locate said entry without determining whether said data

4 conforms to software rules.

1 16. (original) The method of claim 1 wherein the class is a file type and said instance is a

2 file of said file type in a file system wherein the step of associating includes

3 associating with said file of said file type an attribute that is not associated with said

4 file type or any super class of said file type.

1 17. (currently amended) A computer-readable medium carrying instructions for specifying

2 a structure, within a computer system, of an instance of a class, the instructions

3 including instructions for performing the step of:

4 associating with said instance of said class an attribute that is not in said class or any

5 superclass of said class, thereby establishing for said instance said structure

6 that includes storage for data associated with said attribute; and

7 wherein associating said attribute with said instance does not cause said attribute to

8 become an attribute of said class.

- 1 18. (original) The computer-readable medium of Claim 17 wherein the step
2 of associating further includes the steps of:
3 establishing a property bundle that is associated with one or more attributes that are
4 not in said class or any super class of said class; and
5 associating said instance with said property bundle.
- 1 19. (original) The computer-readable medium of Claim 18 further comprising instructions
2 for performing the step of:
3 storing within a database, objects that define said instance, said property bundle, and
4 said one or more attributes.
- 1 20. (original) The computer-readable medium of Claim 17 further
2 comprising instructions for performing the step of:
3 maintaining an object relational mapping system that indicates a correlation between
4 said instance and data stored in a relational database.
- 1 21. (original) The computer-readable medium of Claim 17 wherein said step of
2 associating includes establishing a pointer from said instance to a property bundle.
- 1 22. (original) The computer-readable medium of Claim 21 wherein said step of
2 associating includes establishing a pointer from said attribute to said property bundle.
- 1 23. (original) The computer-readable medium of Claim 17 wherein a property class
2 contains said attribute.
- 1 24. (original) The computer-readable medium of Claim 17 further including instructions
2 for performing the step of:

3 associating a key with said attribute wherein said key identifies said attribute.

1 25. (original) The computer-readable medium of Claim 24 wherein said key is a user
2 defined key.

1 26. (original) The computer-readable medium of Claim 17 wherein the step of associating
2 further includes the step of:
3 maintaining a table that includes an entry that indicates that said instance is associated
4 with said attribute.

1 27. (original) The computer-readable medium of Claim 26 wherein the step of
2 maintaining a table further includes the step of:
3 maintaining said entry to include a key that identifies said attribute.

1 28. (original) The computer-readable medium of Claim 26 wherein the step of
2 maintaining a table further includes the step of:
3 maintaining said table externally to said instance.

1 29. (currently amended) The computer-readable medium of ~~Claim 17~~ Claim 26 wherein
2 the step of maintaining a table further includes the step of:
3 maintaining said table internally to said instance.

1 30. (original) The computer-readable medium of Claim 17 wherein the step of associating
2 further includes the steps of:
3 storing into said instance a hash table; and
4 locating an entry in said hash table for said attribute.

1 31. (original) The computer-readable medium of Claim 30 further including instructions
2 for performing the steps of:
3 receiving data that is designated as a key for locating said entry in said hash table; and
4 using said data as said key to locate said entry without determining whether said data
5 conforms to software rules.

1 32. (currently amended) The ~~method~~ computer-readable medium of claim 17 wherein the
2 class is a file type and said instance is a file of said file type in a file system wherein
3 the step of associating includes associating with said file of said file type an attribute
4 that is not associated with said file type or any super class of said file type.